

RESPONSE TO OFFICE ACTION

ELECTION / RESTRICTIONS REQUIREMENT

Application No. 11/711,775

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Examiner: Westerberg, Nissa M.

Art Unit: 1609

Applicant: Gupta, Shyam K

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RESPONSE

The Applicant acknowledges the Election / Restriction requirement requested by the Examiner.

Accordingly, the Applicant has “Currently Amended” claim 1. The Applicant chose to do this in order to align the claims with the elected species, the election of which was required by the Examiner. Claim 1, as originally submitted, has now been divided into two separate claims, which are currently amended claim 1 and new claim 29.

Also, part of the claim in originally submitted claim 1, “A cosmetically or pharmaceutically acceptable topical delivery system or carrier base composition”, has now been canceled. This is because the compositions of the present invention do not require either a delivery system or a carrier base for their claimed efficacy as MMP inhibitors.

This is further illustrated below.

Claim 1. (Original). A topical Matrix Metalloprotease Inhibitor (MMP) composition comprising; (i) At least one hydroxyaryl or polyhydroxyaryl compound that contains an alkyl carbon side chain with a ketone group attached at the first carbon atom of the alkyl side chain, and said ketone group is directly attached to the aromatic ring at a position adjacent to at least one hydroxyl group of hydroxyaryl or polyhydroxyaryl ring; or at least one N-hetero-aromatic compound that contains an alkyl carbon side chain with a ketone group attached at the first carbon atom of the alkyl side chain, and said ketone group is directly attached to the nitrogen hetero-aromatic ring at a position adjacent to the aromatic ring nitrogen atom; or a combination thereof; and (ii) A cosmetically or pharmaceutically acceptable topical delivery system or carrier base composition.

Claim 1. (Currently Amended). A topical Matrix Metalloprotease, MMP, Inhibitor composition comprising; ~~(i)~~ At least one hydroxyaryl or polyhydroxyaryl compound that contains an alkyl carbon side chain with a ketone group attached at the first carbon atom of the alkyl side chain, and said ketone group is directly attached to the aromatic ring at a position adjacent to at least one hydroxyl group of hydroxyaryl or

~~polyhydroxyaryl ring ; or at least one N-hetero-aromatic compound that contains an alkyl carbon side chain with a ketone group attached at the first carbon atom of the alkyl side chain, and said ketone group is directly attached to the nitrogen hetero-aromatic ring at a position adjacent to the aromatic ring nitrogen atom; or a combination thereof; and (ii) A cosmetically or pharmaceutically acceptable topical delivery system or carrier base composition.~~

The parts crossed out in currently amended claim 1 above, with the exception of phrase “and (ii) A cosmetically or pharmaceutically acceptable topical delivery system or carrier base composition” (which has been canceled altogether), have been incorporated in new claim 29, as illustrated below.

Claim 29. (New). A topical Matrix Metalloprotease, MMP, Inhibitor composition comprising at least one N-hetero-aromatic compound that contains an alkyl carbon side chain with a ketone group attached at the first carbon atom of the alkyl side chain, and said ketone group is directly attached to the nitrogen hetero-aromatic ring at a position adjacent to the aromatic ring nitrogen atom.

Original claims 10 and 11 have now been currently amended, as shown below, wherein a double strikeout item is replaced by underlined item.

Claim 10. (Currently Amended). A composition according to claim ~~2~~ 1, wherein hydroxy or polyhydroxy acetophenone compound is selected from 2-hydroxyacetophenone, 3-hydroxyacetophenone, 4-hydroxyacetophenone, 2,3-dihydroxyacetophenone, 2,4-dihydroxyacetophenone, 2,5-dihydroxyacetophenone, 2,6-dihydroxyacetophenone, 3,4-dihydroxyacetophenone, 3,5-dihydroxyacetophenone, 2,4,6-trihydroxyacetophenone, 2,3,4-trihydroxyacetophenone, 2,3,5-trihydroxyacetophenone, 2,3,6-trihydroxyacetophenone, 2,4,5-trihydroxyacetophenone, 3,4,5-trihydroxyacetophenone, Resacetophenone, 2-Acetyl resorcinol, 4-Acetyl resorcinol, 3,4-Dihydroxyacetophenone, acetyl quinol, Quinacetophenone, 1-(3-Hydroxy-4-methoxy-5-methylphenyl) ethanone, 1-(3-hydroxy-4-methoxyphenyl) ethanone, Paeonol, 5'-Bromo-2'-hydroxyacetophenone, 5'-Chloro-2'-hydroxyacetophenone,

3',5'-Dichloro-2'-hydroxyacetophenone, 3',5'-Dibromo-4'-hydroxyacetophenone, 5-Chloro-3-bromo-2-hydroxyacetophenone, and combinations thereof.

Claim 11. (Currently Amended). A composition according to claim ~~2~~ 1, wherein hydroxy or polyhydroxy propiophenone compound is selected from 2-hydroxypropiophenone, 3-hydroxypropiophenone, 4-hydroxypropiophenone, 2,3-dihydroxypropiophenone, 2,4-dihydroxypropiophenone, 2,5-dihydroxypropiophenone, 2,6-dihydroxypropiophenone, 3,4-dihydroxypropiophenone, 3,5-dihydroxypropiophenone, 2,4,6-trihydroxypropiophenone, 2,3,4-trihydroxypropiophenone, 2,3,5-trihydroxypropiophenone, 2,3,6-trihydroxypropiophenone, 2,4,5-trihydroxypropiophenone, 3,4,5-trihydroxypropiophenone, 1-(2,4-dihydroxyphenyl)-2-hydroxyethanone, (2-hydroxyphenyl)(oxo)acetic acid, 1-(2,6-dihydroxyphenyl)-1-butanone, 1-(1-hydroxy-2-naphthyl)ethanone, 1-(2-hydroxy-1-naphthyl)ethanone, 5,7-dihydroxy-1-indanone, 1-(2-hydroxy-5-methylphenyl)-1,3-butanedione, N-(4-acetyl-3-hydroxyphenyl)acetamide, 4-acetyl-3-hydroxyphenyl acetate, 1,1'-(4,6-Dihydroxy-1,3-phenylene)bisethanone, 1-(1-hydroxy-2-naphthyl)ethanone, 2,3-Dihydro-9,10-dihydroxy-1,4-anthracenedione, and combinations thereof.

ELECTION OF SPECIES.

FIRST SPECIES ELECTION: New claim 25 provides selection of a moiety from the list provided for Z, (OH)_n, and R in Figure 23 (it is worthy of note that there is no R2 to be selected in this particular species).

New claim 29 provides selection of a moiety of alternative ring structure, 2-acetyl-8-hydroxyquinoline, represented by Figure 25, wherein Z=O; R1=CH₃ and R= 8-Hydroxyphenyl as an additional fused ring, in accordance to claim 31.

SECOND SPECIES ELECTION: No election is made, as a claim for the cosmetically or pharmaceutically acceptable delivery system has now been canceled.

THIRD SPECIES ELECTION: No election is made, as claim 18 has now been canceled.

FOURTH SPECIES ELECTION: Election is made according to new claims 28 and 39.

FIFTH SPECIES ELECTION: No election is made, as claim 20 and 22 have now been canceled.

I hope this meets the Examiner approval.

A handwritten signature in black ink, appearing to read 'Shyam K Gupta', with a stylized flourish at the end.

Shyam K Gupta
Applicant
20 July 2007